IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTOR: David Wendt
APPLICATION NO.   10/644,357
FILED: August 20, 2003
CASE: RSW920030138US1

TITLE: METHOD AND SYSTEM FOR COMPILING JAVA CODE
WITH REFERENCED CLASSES IN A WORKSPACE
ENVIRONMENT

MAIL STOP AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION OF DAVID WENDT UNDER 37 C.F.R. §1.131

I, David Wendt, do hereby declare the following:

(1)   My name is David Wendt and I am the inventor of the above-identified application.

(2)   I submitted an invention disclosure ("Disclosure") on which the above-identified application is based to my employer, IBM Corporation, on March 3, 2003, and last modified the aforementioned Disclosure on March 4, 2003. A copy of the Disclosure is attached as Exhibit A.

(3)   The Disclosure describes the invention described and claimed in the present application and the drawings contained in the Disclosure were filed with the present application. Specifically, under the heading "Main Idea" on page 2 of the disclosure, the claimed invention is described. In regards to claim 1, the pending limitations are disclosed under the subheading "2. Summary of Invention" under the "Main Idea" heading. Here, specifically paragraph 2, beginning with "This technique…", recites the limitations of Claim 1 (and each additional
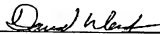
independent claim 8, 11, and 15). In this paragraph, details as to the functionality of the compiler are disclosed, including determining and locating a referenced class file in a workspace, and accessing and returning the file via a special classpath identifier. Additionally, the subsequent paragraphs teach the limitations of the dependant claims as are currently pending.

       (4)   The Disclosure was submitted to my employer prior to the August 4, 2003 filing date of the Kamentz publication.

       (5)   The Disclosure was sent to outside council for preparation and filing on July 1, 2003. A copy of the Transmittal Letter to outside council is attached as Exhibit B.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date:___12/11/06_____   _____

                                        David Wendt

Exhibit A

Required fields are marked with the asterisk (*) and must be filled in to complete the form .

*Title of disclosure (in English)
Method for compiling Java code where dependent classes are in a database managed workspace

Summary

Status	Under Evaluation
Final Deadline	
Final Deadline Reason	
*Processing Location	Raleigh - RSW
*Functional Area [select]	(Nackman: Application Development Tools) Nackman: Application Development Tools
Attorney/Patent Professional	Gregory Doudnikoff/Raleigh/IBM
IDT Team [select]	Steven Miller/Raleigh/IBM
	Art Francis/Raleigh/IBM
	Allan K Edwards/Raleigh/IBM
	Mark Peters/Raleigh/IBM
	R Redpath/Raleigh/IBM
	Scott Rich/Raleigh/IBM
	Thom Haynes/Raleigh/IBM
	Keith Purcell/Raleigh/IBM
	Virinder Batra/Raleigh/IBM
	David Wendt/Raleigh/IBM
	Alan E Booth/Raleigh/IBM
	Martin Presler-Marshall/Raleigh/IBM
Submitted Date	03/03/2003 05:52:35 PM MST
*Owning Division [select]	AIM
Incentive Program	
Lab	
*Technology Code	999
PVT Score	

Inventors with a Blue Pages entry
Inventors: David Wendt/Raleigh/IBM

Inventor Name	Inventor Serial	Div/Dept	Inventor Phone	Manager Name
> Wendt, David M.	505823	7G/5YIA	444-2073	McCrickard, Cindy

> denotes primary contact

Inventors without a Blue Pages entry

IDT Selection

Attorney/Patent Professional	Gregory Doudnikoff/Raleigh/IBM
IDT Team	Steven Miller/Raleigh/IBM
	Art Francis/Raleigh/IBM
	Allan K Edwards/Raleigh/IBM
	Mark Peters/Raleigh/IBM
	R Redpath/Raleigh/IBM
	Scott Rich/Raleigh/IBM
	Thom Haynes/Raleigh/IBM
	Keith Purcell/Raleigh/IBM
	Virinder Batra/Raleigh/IBM
	David Wendt/Raleigh/IBM
	Alan E Booth/Raleigh/IBM
	Martin Presler-Marshall/Raleigh/IBM
Response Due to IP&L	04/04/2003

*Main Idea

1. Background: What is the problem solved by your invention? Describe known solutions to this problem (if any). What are the drawbacks of such known solutions, or why is an additional solution required? Cite any relevant technical documents or references.

Web Content Management systems like WebSphere Portal content publishing (WPCP) provide workspace isolation of content. This isolation works by managing changes to the base set (edition) of the content in a project separately. Basically only users in the same workspace see the changes, others see the base edition content unchanged.

The type of content is varied but involves files and non-file structured content (arbitrary database entries). Both types are stored in a database and retrieved based on workspace using regular database indexing mechanism. Files are stored as blobs and retrieved for the user during preview in a web-application by means of a special file-servlet and JSP servlet.

Non-JSP files are simply retrieved using the workspace bias and returned. JSP files, however, must be processed and executed. The project/workspace contains the JSP source and usually any dependent class files created for the project. The main problem occurs when compiling the JSP file where the dependent classes are in the workspace (database) and not on the file-system.

The solution provided by the current released versions of WPCP require the class files to copied to the file-system. This method as implemented does not provide for workspace isolation. Also, this technique becomes problematic in a cluster configuration. Solutions by other vendors include a special file-system driver to provide workspace isolation or separate copies of each project/workspace processed locally on the client machine.

The retrieval, partitioning and execution of a JSP has been submitted in a previous disclosure. This did not address the dependency on class files within the same workspace and not on the file-system.

2. Summary of Invention: Briefly describe the core idea of your invention (saving the details for questions #3 below). Describe the advantage(s) of using your invention instead of the known solutions described above.

This technique for compiling Java code (e.g. generated from a JSP) where the classes on in the database (workspace) involve a modified Java compiler. Generally, Java compilers are provided a classpath for finding referenced classes. The modified compiler provides fo a special classpath identifier to indicate the context (project/workspace) where dependent classes may be found.

Using the classpath approach allows for appropriate class access when resolving within the position of the classpath. The classpath positioning also allows for chaining of dependent workspaces. No files need to be copied to the file-system or duplicated to other machines in a cluster. Also, non-project classes which are on the file-system (like the JDK) are resolved normally.

3. Description: Describe how your invention works, and how it could be implemented, using text, diagrams and flow charts as appropriate.

The Java compiler is modified to include a special ClassFile and ClassPath objects which are used to resolve and access class byte-codes. This code recognizes the special classpath identifier and use the specified context (project/workspace) to locate the reference classes in the database.

REDACTED

Exhibit B

IBM

Software Group
Intellectual Property Law
T81/503,   P.O. Box 12195
Research Triangle Park, NC 27709

July 1, 2003

Mr. Mark D. Simpson, Esq.
Synnestvedt & Lechner, LLP
2600 Aramark Tower
1101 Market Street
Philadelphia, PA   19107

ENTERED COMPUTER
8-13-03

Re: Docket No.: RSW920030138US1, Disclosure Number, RSW8-2003-0105

Dear Mark:

Enclosed please find materials for preparing a patent application for the above invention
disclosure. We ask that this application be filed by **AUGUST 20, 2003.**

The lead inventor for this applications is:

David Wendt - 1-919-254-2073 - wendt@us.ibm.com

If you have any questions or need anything further, please do not hesitate to call.

Thank you very much for your continued support.

Sincerely,

Gregory M. Doudnikoff, Attorney
Linda Dupont, Assistant
Intellectual Property Law
Software Group

GMD:ld
Enclosures